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ABSTRACT

Validity and reliability studies of the Bullen Reading Attitude Measure (BRAM) were conducted on 291 white children in twelve classes in two schools, grades one through six, in Fall River, Massachusetts. The instrument's validity was obtained by measuring the correspondence between respondents' answers given on the attitude subtests and their answers given during an interview and corroborated by answers given by parents in a mailed questionnaire. The reliability coefficients, determined by the test-retest method, were unusually high for attitude tests. The Bullen Reading Attitude Measure consists of subtests that measure different components of reading attitudes through the pair comparisons method. The primary pictorial form designed for children in grades one to three, measure attitudes toward reading at home, reading in school, and desire to receive books as presents. The written form designed for children in grades four through six, measures the same components as the primary form and two additional components--desire to visit the library and to purchase books. A unique feature of the BRAM is that it enables the examiner to know the relative strength of an attitude as well as its magnitude. This information is useful to teachers, clinicians, and researchers because it enables them to identify children who express consistent negative attitudes, or inconsistent positive attitudes, which demand differential treatment. (Author)

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Final Report

Project No. 1A045
Grant No. OEG-1-71-0014 (509)

THE DEVELOPMENT AND VALIDATION OF A READING ATTITUDE MEASURE FOR ELEMENTARY SCHOOL CHILDREN

Gertrude F. Bullen

Council for Public Schools, Inc.

Boston, Massachusetts

September 1972

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Gertrude F. Bullen
Principal Investigator

ABSTRACT

Validity and reliability studies of the Bullen Reading Attitude Measure (BRAM) were conducted on 291 white children in twelve classes in two schools, grades one through six, in Fall River, Massachusetts. The instrument's validity was obtained by measuring the correspondence between respondents' answers given on the attitude subtests and their answers given during an interview and corroborated by answers given by parents in a mailed questionnaire. The reliability coefficients, determined by the test-retest method, were unusually high for attitude tests.

The Bullen Reading Attitude Measure consists of subtests that measure different components of reading attitudes through the pair comparisons method. The primary pictorial form designed for children in grades one to three, measure attitudes toward reading at home, reading in school, and desire to receive books as presents. The written form designed for children in grades four through six, measures the same components as the primary form and two additional components -- desire to visit the library and to purchase books.

A unique feature of the BRAM is that it enables the examiner to know the relative strength of an attitude as well as its magnitude. This information is useful to teachers, clinicians, and researchers because it enables them to identify children who express consistent negative attitudes, or inconsistent positive attitudes, which demand differential treatment.

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CHAPTER I

Background and Purpose

Presently, no suitable attitude instrument exists to determine how the young reader feels about books as a source of pleasure, a part of his life. Yet, perhaps the single most crucial index of the kind of a reader a child will become is determined by his attitude toward reading; the extent to which he is willing to let books become a part of his world. We can know from a glance at a child's school record his standing in reading comprehension, vocabulary, and other learning skills. But probably the single most crucial index of the kind of reader a child is, or will become, is missing from that record, his attitude toward books and reading as a source of pleasure. The purpose of this study was to meet this pressing need by developing a valid and reliable instrument to measure reading attitude of young children.

A considerable amount of attention has been devoted to the improvement of reading instruction of urban children, which has resulted in new reading materials and innovative practices (performance contracting, tutorial, the talking typewriter), but little attention has been given to the measurement or development of desirable attitudes toward reading in the interest of helping children establish life-time reading habits. "Professor Philip Ennis, of Wesleyan University, has stated that, 'The pressure to read for practical purposes can be so heavy and ... onerous due to the training of how to read a page in school that the use of print for other motives can be endangered.'" (Dempsey, 1971) Motivation may be the most important facet of the reading problem. We need to teach children <u>to read</u> as well as <u>how to read</u>. If we are to help children find the pleasure in reading that will continue to broaden their horizons throughout a lifetime, then the aims of reading instruction must transcend the mere teaching of skills. While the national goal of functional literacy for all is critical and laudable, we need to aim higher if we plan to have a truly literate population that will demand more than offered by television and who will use their leisure time to enrich their lives through reading. Whenever new reading programs or practices are instituted, they should be measured for their motivational effect as well as their pedagogical effect.

Emphasis on student achievement has encouraged the development of instruments to measure the cognitive domain; skills and level of accomplishment. As researchers produced more and more evidence that motivation was a determinant of academic interests and aspirations, an increasing amount of interest in measuring level of motivation and in providing motivational learning activities created a need for instruments to measure attitudes toward learning specific subject matter such as reading, mathematics, and science. The nature of attitudes render their measurement a difficult task, which helps to explain why so little work has been done on the development of useful measuring instruments. Further, attitudes are subject to "mood swings" which can vary more greatly over a short period of time than do achievement scores which are not appreciably affected by change in temperament.

Because of the greater difficulty in constructing tests for young children, most attitude instruments have been designed for use with junior or senior high school students to whom they can be easily and quickly administered. Yet, it is during a child's early years when he begins to form attitudes which are not easily modified in later years. It seems more logical to have instruments available to measure attitudes of very young children so that consistent negative attitudes can be detected early and changes effected more easily. Some reseachers, stymied by the lack of instruments appropriate for use with elementary school children, have adapted instruments that have been intended for use with older children. This approach has been unsatisfactory, because the basis for the questions or choices in the instrument often include values and concepts beyond the experience and understanding of young children. A few reading attitude tests for young children have been constructed by researchers who have realized the need to measure this important and controlling dimension of reading behavior when conducting studies on reading. But the limitation in their content and/or method do not render them suitable for general use. The methods used to determine their reliability and validity are also questionable.

The lack of adequate instruments has hindered and even precluded certain types of research studies. The purpose of this research was to address this pressing need by developing a valid and reliable instrument to measure reading attitudes of elementary shool children, grades one through six. The instrument is designed for use by teachers, librarians, guidance counselors, reading specialists, curriculum planners, and researchers. When the proposed attitude instrument was discussed at an annual meeting of the American Educational Research Association in 1970, requests to use the instrument as soon as it was developed came from researchers at the Research and Development Centers at the University of Michigan, University of Wisconsin, and from Harvard University, University of Pittsburgh, and University of Hawaii.

It is possible that the lack of instruments to measure attitudes and reading habits has caused educators to focus exclusively on the development of reading skills in the belief that growth in ability to read will signal an increase in desire to read. This may be wishful thinking, because there are adults who read proficiently and seldom, and those who do not read proficiently but read often. The point being made here is that the presence or absence of reading skills is only part of the "reading problem." How are we dealing with the other part of the problem? The relevance of reading attitudes should not be overlooked. Educators need to take a hard look at the kind of reader a child will become and begin to concentrate some of their energies on helping him develop life-time reading habits. Obviously, the best time to start is as early as possible, during the formative years. Ironically, this age group has fewer diagnostic tests designed for them than older age groups whose attitudes and habits are more ingrained and less amenable to change.

Teachers would be better equipped to handle the total "reading problem" if they were given more complete information on each child. Reading attitude scores and substantive information on factors contributing to the formation of those attitudes should be a part of each

child's school record. While a single index of a pupil's attitude toward learning or achievement may be useful in forming a general characterization of a student, it does not necessarily reflect his disposition toward books and reading for pleasure. More specific and diverse measures of reading habits and attitudes are needed to assess the multidimensional character of reading.

Others (Shotanus, 1967; Askov, 1969) have structured unidimensional reading attitude instruments which have combined recreational activities with leisure reading activities to determine the extent to which reading is enjoyed as a pastime. It was Askov's belief that a unidimensional approach would avoid negative reactions to reading that might be caused by conditions in the classroom; placement in a low group, dislike of teacher, or type of reading instruction. Her premise seems valid. However, children's attitudes toward reading in school are important to those who are responsible for the teaching of reading or evaluation of reading programs. An instrument that could adequately measure this dimension as well as others would be more useful. Other aspects of the complex of reading attitudes might be the desire to visit the library or to own books.

In the light of the need to assess supposedly different dimensions of reading attitude, if indeed they do exist, and to determine their interrelationships, a more comprehensive reading instrument is required. A multivariate measure of children's attitudes, which would contain a subtest for each dimension, would aid in the diagnosis and treatment of specific problems in reading motivation. A useful measuring instrument would guide teachers in structuring reading experiences geared to motivating children to read. Scores on subtests would indicate whether teachers should work more closely with parents, make more books available at home (either through school or public library), expose the child to literature that he has missed in his background either at home or in school, or carry out a school reading program that would increase reading interest.

Seldom, if ever, is a teacher required or directed to carry out a reading program for the purpose of improving reading attitudes. The availability and use of an attitude instrument presumably would help teachers become more aware of children's attitudes and the need to measure them accurately. Thus far, teachers have had to rely on general impressions of children's reading attitudes through their behavior in school, which may be only one dimension among many that contribute to a general attitude. While it is generally agreed that an attitude is a state of readiness in which one responds a certain way when confronted with certain stimuli, some persons may not possess any particular attitudes on specific issues. Strong attitudes may or may not be reflected by a person's behavior. Also, a professed attitude may be false since the respondent may wish to conceal his true feelings for fear of social disapproval or reprisal by authority figures. Another problem in measuring or judging attitudes is that young children are not always aware of their true feelings. Therefore, teacher's questions or test questions may not be answered accurately. For reasons of lack of introspection, especially on the part of young children, and because of the tendency to give socially desirable responses, Edwards (1957) feels that teachers and clinicians need to have objective measures of attitudes.

Major and Minor Objectives. The major purpose of this study is to construct a valid and reliable instrument to measure the reading attitudes of elementary school children, grades one through six. Other minor objectives are as follows:

1. To determine to what extent, if any, reading achievement and different reading attitudes i.e., reading at home visiting the library, wanting to own books, being given books as presents, and reading in school are related to each other. Reading achievement will be considered as a variable for grades two to six only, since first-graders will not have been taught to read by fall, 1971, when the proposed testing will take place.

2. To determine to what extent, if any, previous reading experiences (home, school, and library) contribute to present attitudes.

3. To explore reasons for unstable responses registered by discrepancy between scores on test and retest. Possible reasons may include such variables as age, level of reading achievement, ownership of books, library usage, school reading program, remedial tutoring.

The proposed instrument will be a multivariate measure of children's attitudes (as recommended by Aiken, 1970) toward various aspects of reading; reading at home, reading in school, visiting the library, owning books, buying books, receiving books as presents, concept of self as a reader, desire to read to others (siblings or peers), etc. Reading variables will be measured in separate subtests in which reading will be one of several attractive alternatives. The subtests will be statistically tested for their degree of relationship, since the final selection of subtests should measure relatively independent factors.

The instrument is intended to be a diagnostic aid for clinicians and school and library personnel, but it may also be used by researchers in a pre- and post-test experimental design for purposes of group comparisons. Whether the instrument proves to be predictive of reading achievement and reading attitudes in the future cannot be determined or handled within the scope and time limit of the study, but relationships between reading achievement and various attitude subtests and questionnaire items will be examined and reported.

CHAPTER II

Related Research

The rationale for the structure of the proposed attitude instrument is based on a review of the techniques of attitude scale construction and existing attitude measures. To review in as little detail as possible the techniques commonly used to assess motivation and to point out their limitations, I have made three major classifications; projective, self report, and observational.

Projective techniques are used primarily by psychologists and other clinicians who are able to test students individually in a laboratory setting. The stimulus used to evoke responses must be sufficiently ambiguous to allow the mind to explore it relatively free of constraints that might be imposed by concrete objects, photographs, or representative drawings. The most well-known projective tests are the Thematic Apperception Test, better known as the TAT (Murray, 1943), and the Rorschach ink-blot test (Klopfer and Davidson, 1960). Both have equivocal stimuli and are used commonly in clinical settings. Their potential as a source of rich and usually valid information (Weiskopf and Dieppa, 1951) is dependent on the keenness of the interpreter to extract certain patterns of responses from which he may infer specific motivations. Since classroom teachers would have neither time nor training to conduct these tests, their use in the classroom is prohibted. Further, the responses are not likely to generate specific information that would guide teachers in structuring learning experiences or in adapting current ones to the student's needs.

Because the Rorschach and TAT Tests do not lend themselves to classroom use or specific subject matter, researchers have varied the projective technique to measure interest in school and reading by using as stimuli pictures of boys and girls reading books among other pictured activities (Yanofsky, 1965; Askov, 1968). The validity of this procedure is questionable because it violates the principle of equivocal stimuli and non-specificity on which the projective technique is based, the very features that make it a powerful method for the sophisticated psychologist. Further, use of representative pictures poses constraints when re-pondents fail to identify with the situation or person in the picture, or when wording of the question or content of the picture may prompt socially desirable responses. Adaptations of the projective technique can be valid as Askov's study showed, but they seem to offer no more validity than self-report techniques.

Self-report techniques have several mechanical advantages and some serious shortcomings. They are easy to score and can be group administered. Self-report instruments may take the form of a rating scale; e.g. the Likert Scale (Likert, 1932), the Thurstone Scale (Thurstone and Chave, 1929), the semantic differential (Osgood, Suci, Tannenbaum, 1957), or a checklist of behaviors on which students rate themselves. The use of incomplete sentences (Rotter, 1947) to evoke responses is also a popular method, but the answers are not as easily interpreted or scored as other types of self-report instruments. Two major weaknesses in self-report instruments are as follows: the respondent must be aware of his own feelings and behavior to insure accurate reporting, and,

whether subconsciously or intentionally, his awareness of the socially desirable response tends to introduce bias in his answers.

Observer ratings have more specificity than the projective or self-report instruments. The observer may focus on only those particular behaviors he wishes to record, and unlike projective techniques, this method can be handled by persons who have received only limited instruction, particularly when the situation is structured or when the questions are specific. Obviously, when using this method, the observed must not be aware of the observer which might tend to influence the observed's behavior. When this testing condition is met, the possibility of respondent bias is eliminated, but the possibility of observer bias is present, unless it is controlled by the composition of the rating scales. Should the observer bias be anticipated because of the structure of the rating scale, the researcher could use several observers and measure the reliability of ratings (Ebel, 1951), although this method would be inefficient for the classroom teacher. But when the rating scale is structured to prevent observer bias, observer ratings of behavior have more face validity than self-report techniques. However, in practice, the teacher would be hard-pressed to observe every student and record his behavior according to the format on a rating scale. Yet, the teacher is constantly observing her students and teacher's opinions of student motivations are often used to validate self-report instruments.

Existing Attitude Measures. Behavioral tests of motivation have been developed by Feather (1961) and McClelland and Atkinson (1958). These tests have been effective in providing evidence to support the theory that motivation is a function of degree of perseverence, risk-taking, and delay of gratification. Empirically, we also know that students will persevere longer when the matter is interesting or when their social and emotional needs are being met. However, scores on these tests would yield only a global index of a student's motivation, which might be useful but impractical in the classroom from the standpoint of planning specific remediation, if needed. Other types of tests are needed to obtain specificity.

Two exemplary reading attitude tests designed for elementary school students are the San Diego Reading Interest Inventory (1961) and the How I Feel Attitude Inventory Test by the Collier County Board of Public Instruction. Both are self-report instruments. The San Diego Reading Interest Inventory was used in numerous reading studies on elementary school children, perhaps because it was the best instrument available at that time. The inventory contained questions which required merely "yes" or "no" answers, and thus permitted hostile children to answer "no," and docile and compliant children to answer "yes," according to whether they wished to please or alienate the examiner. The "fakability" of the instrument invalidates it for purposes of scientific evaluation. The How I Feel Attitude Inventory Test avoids verbal stimuli and written responses, which is almost a necessity when testing very young children. The respondent is asked to circle one of a set of six faces portraying different expressions to statements from the examiner such as, "I feel this way when it is time for my reading lesson."

Reliability. Test reliability is a more difficult problem to handle in constructing attitude instruments than it is in constructing achievement instruments. Test items in the cognitive domain are discrete and answers are either correct or incorrect. In the event multiple choice items are used, a correction for guessing may be employed. Reported test reliability coefficients of achievement tests are usually acceptable if they range from .85 upwards, the higher the better. None of the few attitude instruments designed for use with young children are available commercially and the reliability coefficients are not known. It might be expected that attitude instruments would be less reliable than achievement instruments, particularly for young children whose attitudes are not so firmly established and are more subject to change than those of older children or adults.

Test reliability is usually derived for an entire group called the norm group. The reliability coefficient can tell us whether the attitude measured is stable over a short-term period of one, two, or three weeks. We must assume that the reliability coefficient can be applied with equal certainty to other groups who may differ considerably in the extent to which they are firmly committed to their expressed attitudes. Recent exploration by this investigator has revealed that cultural backgrounds may significantly affect a test's reliability. A widely-used, standard reading achievement test with a reported reliability coefficient of .91 yielded reliability coefficients of .04, .35, and .86 respectively, when used with three groups of urban black children at the end of their first grade in school.

Attitudes, unlike knowledge, are changeable. It is possible that an attitude may be expressed consistently over a short period of time and yet not be firmly rooted. Also, a respondent might feel very positive about wanting to read a book in his leisure time, and yet when confronted with other desirable alternatives, his attitude could waver. As attitude scores are now derived, an examiner could be led into believing that certain persons regarded reading favorably simply because they had high or relatively high scores, since existing instruments make no provision for measuring consistency scores for each individual. This problem could be handled more effectively by the design and content of the instrument. The content could contain similarly attractive alternatives that would permit measures of attitude strength as well as consistency, thereby enabling the examiner to identify children who express negative reading attitudes consistently as well as children who express positive attitudes, but who are not consistent in their choices of reading.

Score interpretation is dependent on the content of the instrument. When the content demands that a respondent make choices between equally attractive or unattractive alternatives, it is possible to note inconsistencies in the attitudes of students who may have scored relatively high or low in reading interest. Two measures are needed to help teachers in planning or evaluating reading programs for individuals rather than groups; one, the relative strength of attitude, and two, the consistency of expressed attitudes.

Validity. Theoretically, an attitude score would be valid if the respondent exhibited behavior that corresponded commensurately. Unfortunately, this correspondence has seldom been obtained. A plethora of studies on the relationship between attitude and behavior have shown the relationship to range from a low significant correlation to a zero or even negative correlation (Festinger, 1964). A frequently-asked question is whether an attitude precedes a behavior or whether a behavior begins to condition a certain attitude. Campbell (1963) takes the position that attitudes precede behavior since an attitude is easily expressed while a behavior needs a longer conditioning period. The attitude-behavior argument is not the focus of this study, but it does have a bearing on the methods selected for test validation. The discrepancy between expressed attitude and actual behavior seemingly brings into question the validity of all attitude instruments. Further questions may be raised on what behaviors were measured in previous validity studies, and whether they were recorded under favorable conditions.

In the realm of reading, it would be logical to assume that negative attitudes would hardly be expressed by those who actively and voluntarily engage in reading for pleasure or information. Yet, the reverse may not necessarily be true, i.e., those who express positive attitudes may seldom voluntarily engage in reading unless the opportunity for the expression of the behavior is present. This premise is basic to understanding the relationship between attitudes and behavior. We should not expect an attitude to be manifested by a corresponding behavior unless the respondent is given the necessary prerequisities of other attitudes, character traits, other alternatives, and an environment that favors rather than conflicts with the expressed attitude. This explanation seems to answer the question of why we do not find more studies that show high correlations between attitudes and expected behaviors, and it also raises the problem of obtaining an adequate measure of an attitude test's validity, since conditions favorable to the occurrence of an expected behavior may not be present, and we do not know what related attitudes reinforce its likelihood. Attitude instruments are necessarily limited to the measurement of only a few aspects of the complex of attitudes and do not measure actual behaviors--they must be inferred.

One procedure used to validate a reading attitude instrument calls for teachers to judge which students exhibit behaviors that indicate high or low interest in reading. Usually, only a few high and low interest readers are selected and a t-test of the differences in their scores is undertaken. If the difference between groups is significant, the instrument is declared valid. This method is a short-cut and a desirable alternative to direct observation of a respondent's behavior, since it would be virtually impossible to observe numerous reading behaviors under various situations. But teachers are limited in opportunities to observe students' behavior outside the school environment where more alternative and freedom of choice are open to them. It is surprising, therefore, that teachers have been successful in judging which of their students have more positive reading attitudes. (Askov, 1968). However, in Askov's study, only first-grade children were judged after teachers

had worked with them for a year. Whether this method would work equally well for older children earlier in the school year, when teachers know them less well, needs to be examined.

Of greater value might be the exploration of conditions favorable to reading at home and in school and other attitudes toward reading such as book ownership, library usage, and other hypothetical factors which could be tested for their contribution to specific reading attitudes, for these are possibly the determinants that must be altered if we seek to change attitudes. In turn, these factors would provide substantiating data for test validation.

CHAPTER III

Method and Design

With all the aforementioned problems inherent in the techniques used to measure motivation and to construct reliable and valid instruments, it is understandable why few suitable attitude instruments are available for use with older children and why virtually no suitable ones exist for younger children. The design of the Bullen Reading Attitude Measure (BRAM) attempted to avoid the shortcomings of the basic methods used to construct attitude instruments by using a variation of the self-report technique that prevents respondents from giving socially desirable responses, one of two major weaknesses of the self-report technique. Two additional instruments were designed and used to validate the attitude measure: one a self-report by the respondent (interview) on his reading activities, and the other a report by his parent (questionnaire) on his reading activities. Ultimately, teacher judgment of children's attitudes toward reading was explored as an added measure of validity. Thus, the answers to parent, teacher, and child could be cross-validated and correlated with scores on the attitude measure.

Pair Comparison Method In order to control for the possibility that respondents might give what they believed to be socially acceptable answers, the pair comparison method was selected and the pairings were restricted to socially desirable alternatives. Essentially the method consists of pairing each item with every other item; the examinee must choose one alternative in each pair. The advantage of this technique for use with young children is the need to consider only two alternatives simultaneously. Guilford (1954, p. 174) regards the method of pair comparisons as a replacement for the less accurate and less valid rating scales, which require more exacting experimentation and development. Further, he encourages the use of the pair comparison method as a "criterion of validity against which to check any of the less accurate or less dependable methods of evaluating stimuli, either persons or things, attributes or opinions, wherever the results of those less reliable methods are held in question."

By using paired stimuli that are equally attractive, the tendency to give socially desirable response is controlled. Further, the use of forced-choice items of presumably equal desirability controls the tendency for examinees to form response sets, or to give deviant answers that are not readily interpretable. Edwards (1958) and Strong (1959) used the forced-choice method in constructing two of the most outstanding instruments to measure needs and interests, respectively.

Another feature of the method is that it permits pairings to be repeated in reverse order as a check on the consistency of answers given for each subtest, either for groups or individuals. Response consistency can also be determined by the extent to which the choices can be rank ordered to form a perfect scale. This method is intrinsically more reliable than other methods, since, in the present case, when as few as six or eight items are paired with each other, it would

extremely difficult for young children to conscientiously prearrange a hierarchy of choices and respond accordingly. Obtaining a measure of the test's internal consistency for each respondent is a departure from the conventional methods in which only group measures are reported. Repeated pairings of selected items permits a quick measure of the internal consistency of each subtest for each individual, thereby enabling the scorer to know whether an examinee expressed his attitude consistently. A high internal consistency score would be particularly helpful in the assessment of children who score low in reading attitudes, since it would indicate their negative attitudes were firmly ingrained. A low consistency score would indicate an expressed attitude had not been firmly established. The advantage of knowing how firmly respondents are committed to their expressed attitudes lies in the greater potential for accurate assessment and treatment of individual differences. Teachers, clinicians, or curriculum planners could vary approaches to the problem accordingly.

CHAPTER IV

Procedures

Content, Forms, and Purpose. The need for a multivariate measure of children's attitudes was discussed earlier. The content was derived after consideration of the various aspects of reading in the life of an elementary school child; reading at home, reading in school, visiting the library, desire to receive books as presents, and desire to purchase books. Each aspect was measured in a separate subtest. Later, the subtests were tested for their interrelationships, validity, reliability, and internal consistency. Although it was expected that all subtests would be statistically significantly related because of the homogeneous nature of the test, those that proved to be most highly correlated could be eliminated from the final form in the interest of brevity and of having subtests measure relatively independent factors.

The primary pictorial form for grades one through three included three subtests: reading at home, reading in school, and desire to receive books as presents. The written form for grades four through six included the same subtests and two more were added: desire to visit the library, and desire to purchase books if given two or three dollars to spend. The two subtests on desire to receive books as presents and to purchase books were seemingly tapping the same dimension, except that the latter connoted a more overt behavior.

The instrument was designed with two purposes in mind; first, to provide teachers, clinicians, librarians, and educational researchers with specific indices of children's interests in books and reading in relation to their other interests, and second, to direct their attention where changes might be made, e.g. the school reading program, reading conditions at home, specific types of library programs, or the availability of books at home and in school.

Readability. One of the most frequent criticisms of measurement instruments designed for use at the elementary school level is their interpretability and readability (Anttonen, 1968; Cleveland, 1962). The readability problem was readily solved by using pictorial form for the lower grades and a written form containing one- or two-word alternatives for the upper grades. As an added safeguard, all words could be introduced by the examiner, but it is improbable that children in grades four through six would be unable to recognize or know the meaning of common words such as baseball glove, jump rope, roller skates, library, or science museum unless they are recent immigrants or have severe psychological difficulties or mental impairment. If so, the examiner has the option of administering the pictorial form.

Selection of alternatives for the attitude instrument. The selection of alternatives for the reading in school subtest were readily apparent. Reading was paired with other skill subjects, arithmetic and spelling, with less academic subjects, music, art, and handwriting, all of which were paired with each other. Alternatives varied in this way enable a test scorer to rank order choices for individuals or classes. Accordingly, it is possible to determine whether interests are academic or non-academic. (Data on this dimension are presented later in this report.)

An open-ended questionnaire was constructed in order to determine appropriate stimuli to be used as choices on the other subtests. The questions concerned children's preferred activities at home, places they liked to visit, presents they would like to receive, and things they would buy if given two or three dollars to spend. None of the questions were directed toward reading. Below is an example of questions asked. The Preferred Activities Questionnaire is shown in Appendix A.

A. What are some things you might like to do on a rainy Saturday or Sunday when you cannot go outdoors to play?

The questionnaire was individually administered to ten white children at each grade level, one through six, in two schools in Fall River, Massachusetts. They were enrolled in a Title I summer program in which participants were selected according to need for extra-curricular work. Most of the children lived in the economically depressed "Flint" area of Fall River, a community of 100,000 which only recently has begun to emerge from a severe economic depression that started in the 1920's when its principal industry, textiles, relocated mills in other states where the cost of labor was cheaper.

The types of preferred home activities children cited were simple, ranging from domestic activities such as coloring with crayons, washing dishes, or helping take care of younger children to playing games, and occasionally reading a book or doing homework. Frequently, their choices of presents they would like to receive were expensive items such as mini-bikes and motorized go-carts which were beyond the realm of possibility for them to receive. These items were not included in the instrument as alternatives to books, since they did not represent a realistic choice situation for them. Some of their most and least frequent responses were selected as alternatives with the constraints that all responses were actual things most children could do, buy, or receive, and represented approximately the same monetary value, i.e., books, phonograph records, and candy were more acceptable items than horse, motorcycle, or mini-bike, while a visit to the acquarium or circus were more acceptable alternatives than to visit the moon or the planet Mars. The responses given and their frequencies were similar to those obtained in a previous study from children who represented broader spectrums of economic income and academic achievement. On the basis of these results, it was decided to use an earlier version of the intended attitude instrument and to make modifications where needed, particularly since illustrations for the primary pictorial form were already available.

Number of Alternatives. The number of alternatives used in each subtest on the primary form was limited to six; which when paired with each other in all possible combinations made 15 pairs. The number of alternatives for three of the upper grade form subtests was extended to eight, which when paired with each other totaled 28 pairs. The overriding necessity of having a brief test to accomodate the brief attention span of primary grade children precluded the possibility of having more pairs in each subtest on the primary form. This restriction is unfortunate since the brevity of the test ultimately affects its reliability; an increase in the number of pairs would increase the reliability coefficient commensurately.

Content of the Bullen Reading Attitude Instrument. On both forms, an introductory question is asked about foods the respondents enjoy eating in order to gain their interest and to ascertain their knowledge of instructions. The following three situations and the reading dimension they represent on the primary form are as follows:

1. A rainy Saturday when you cannot go outdoors to play (reading at home).
2. Some things you might do in school if you were given your choice. (reading in school).
3. Presents you would like to receive (receiving books as gifts).

The upper grade written form contained two additional situations and reading conditions as follows:

4. Places you would like to visit (visiting the library).
5. Things you would buy if you had two or three dollars to spend (purchasing books).

Illustrations and format. The illustrations were contributed by Robert McCloskey, author-illustrator of numerous outstanding children's books. Mr. McCloskey also made suggestions on the format. He advised having pairs placed closely together for visual ease and the use of 4 1/2 x 11" paper to help the young child keep his place and to facilitate turning the pages of the booklet. Illustrations of alternatives were kept simple and representative in order to allow the respondent to choose his own setting for the object or activity without restrictions that might have been imposed by the inclusion of extraneous materials, persons, or settings that might be unfamiliar or that might prompt a certain answer. Representative illustrations give the respondent freedom to choose a setting that is meaningful to him.

The booklet for the primary grades is ten pages long and takes 15 minutes to administer. The upper grade booklet is five pages long, and takes 20 minutes to administer. Each subtest is printed on a different color paper. Color coding the questions permits the examiner to make sure each respondent is working on the right question, and it alerts the respondent to the fact that a different question is being asked. Figures 1 and 2 on the following page show examples of the format of the attitude instrument.

Children's Questionnaire on reading activities. The children's interview questionnaire contained 26 questions directed toward reading conditions at home. They included availability and care of books, frequency of reading, whether reading at home was preferred to reading in school, whether others at home read to the child now or when he was younger, and whether parents used the public library. On the basis of the trial test, only a few changes seemed warranted in the wording of the children's questionnaire in preparation for the final study. The final form, which contains 26 questions, is shown in Appendix B.

On after-school activities, the question was scored according to number of activities and whether their preferred activities were academic

FIGURE 1*

Primary Pictorial Form

PRESENTS YOU MIGHT LIKE TO BE GIVEN

FIGURE 2*

Upper Grade Form

C. Below are a number of places where you might like to visit. Make one choice (X) for each pair.

art museum___ 1___aquarium
famous old house___ 2___art museum
baseball game___ 3___science museum
circus___ 4___art museum
movie___ 5___circus
science museum___ 6___famous old house
library___ 7___movie
aquarium___ 8___baseball game
famous old house___ 9___movie
movie___10___science museum
circus___11___aquarium
art museum___12___baseball game
library___13___aquarium
baseball game___14___famous old house
science museum___15___art museum
aquarium___16___science museum
movie___17___art museum
famous old house___18___aquarium
aquarium___19___movie
library___20___baseball game
circus___21___famous old house
science museum___22___circus
art museum___23___library
circus___24___baseball game
famous old house___25___library
library___26___circus
science museum___27___library
baseball game___28___movie
art museum___29___circus
famous old house___30___science museum
aquarium___31___library
baseball game___32___art museum

TM 004 620

* Bullen Reading Attitude Measure 15

or non-academic. Frequency of watching television was included as a means to shed some light on how much time might have been spent on reading and whether those who watched television frequently read less often. If children reported having books at home that they enjoyed, they were asked to substantiate their answers by giving titles or adequatedescriptions of the books. If they were unable to do so, no credit was given. A ratio score of books per child was computed from the total number of books owned by the respondent and other siblings. The care and importance of books to the child or family was determined by where books were kept, whether they were kept in a bookcase or special place. It seemed important to learn whether parents used the public library or accompanied their children during library visits. Other questions dealt with the amount of exposure to books a child might have had by having others read to him, and whether some persons were more influential than others. The final question addressed the child's concept of himself as a successful reader, since a sense of failure might condition his attitudes towards book ownership and leisure-time reading. The Bullen Reading Attitude Questionnaire is shown in Appendix B.

Trial Test of the Bullen Reading Attitude Instrument. The attitude instrument was administered to five children at each grade level, one through six. Generally, their answers on the interview questionnaire supported their attitude scores. Those with higher scores read for pleasure more frequently, had visited more places, had more books available at home, and they and their parents used the public library more frequently. The amount of time spent in watching television was unrelated.

Parents' questionnaire. In the interest of obtaining a high percentage of returns, the parents' questionnaire of their children's reading attitudes was limited to eight pertinent questions. They paralleled eight of the questions on the children's questionnaire. Thus, the correspondence between answers given by the child and his parent could be compared and gross discrepancies eliminated. The parents' questionnaire was accompanied by a stamped, addressed return envelope and a letter from James F. Nicoletti, Director of Middle Grades Education, citing the purpose of the questions and thanking them for their interest and cooperation. The Parents' Questionnaire on Children's Reading Activities and letter to parents are shown in Appendix C.

Parents were asked the following questions:

1. Frequency of child reading at home
2. Whether child visited Fall River Children's Library
3. Whether child borrowed library books
4. Whether they read to their child now or in the past
5. Number of persons who read or had read to child
6. Number of other school-age children they had
7. Last time child read a book at home.
8. Number of books their school-age children owned

Parent-child discrepancy scores. A score sheet was designed to register the scores of each child and his parent on eight selected questions in order to score the magnitude of the difference, and to note whether the lower score was given by the child or his parent. The discrepancy scores were used to determine the validity of the child's or parent's answers.

When statistically significant differences occurred, both scores were discounted. The score sheet is show in Appendix D. Below is an example of the first question:

1. Reading at home

Parent's answer _____

Child's answer _____

Difference _____

(Yes=1; No=0) Lower score given by parent _____

(yes=1; No=0) Lower score given by child _____

Design of the major study. The sample selected for the major study in Fall River, Massachusetts was comprised of 291 children from 12 classes, grades one through six, in two schools. Children in School A generally were good achievers whose family income was substantially higher than children in School B. Family income for the entire sample ranged from the upper middle to the lower income brackets. Average achievement in School B was below the city and national norms, while School A children were above the norms. The heterogeneity of the sample permitted testing of a wide range of interests and abilities. A subsample of 212 children were randomly selected to be interviewed on their reading activities. These children were interviewed by the Project Director and volunteer student teachers from Southeastern Massachusetts and Bristol Community College who were given instruction by the Project Director in conducting interviews. Each interview lasted 20 minutes. Parents of children who were interviewed were sent questionnaires on their children's reading activities. The correspondence between parents' and children's answers would be determined and, if no major discrepancies existed, the responses would be correlated with the attitude scores to test the instrument's validity.

Following the interview sessions, the Bullen Reading Attitude Measure was administered to all children in twelve classes; the pictorial form for grades one through three was administered to small groups, no larger in number than seven, the written form for grades four through six was group-administered to entire classes. The Project Director conducted all of the attitude testing, thereby eliminating the possibility of any bias as a result of differences in examiners.

The use of teacher judgment to substantiate the instrument's validity was also explored. All 12 teachers were asked to select five children whom they thought had positive attitudes and five whom they thought had negative attitudes. They were given written suggestions to aid in making their selections and encouraged to use their own bases for selection. The need for suggestions on selections seemed advisable because it is a common, though unsupported belief, that only the better reading achievers would have positive attitudes toward reading. They were cautioned that research studies have not been able to find this correspondence to any significant degree. Instructions given to the teachers are shown in Appendix E.

The reliability of the Bullen Reading Attitude Measure was determined by a retest conducted three weeks after the initial testing. When the children realized they were being asked to respond to the same test items they had responded to three weeks earlier, they asked whether they should give the same answers they gave before. They were told to give the same answers if they felt the same way and different answers if they had changed their minds. "Your answers should tell me how you feel at this time." This instruction was not a challenge to them to remember their former answers and would, in effect, provide information on shifts in attitudes over a short period of time which would help in determining whether stability of attitude would be reflected more by older rather than younger children.

CHAPTER V.

Results

Attitude toward responding to the attitude measure. The children's enthusiasm for the attitude instrument was engendered immediately by the sample question on foods they liked to eat. Children in the lower grades were fascinated by the illustrations, and all children seemed to enjoy the freedom of being able to make their own choices. They asked whether they could keep the instrument or whether it would be given to them later. The school principal reported that children had asked when the examiner would return to play some more games with them. Despite their high spirits, their mean scores in reading attitudes were low, which gave some indication that their answers were candid, and that they were not trying to give socially acceptable answers.

Questionnaire Returns. Parents of children in School A returned the questionnaires on their children's reading activities sooner than those in School B. Questionnaires were mailed a second time to 41 per cent of the parents in School A and to 57 per cent of the parents in School B. A third questionnaire was sent to 33 percent of the parents in School B. The unusually high rate of return for a mailed questionnaire, 93 per cent for School A and 78 per cent for School B, was achieved mainly because of the interest of the school principals and their help in urging parents to cooperate.

Description of sample. Several variables were selected from the total number of variables to describe the sample tested and to show their variability. These are shown in Table 1. The average reading comprehension scores on the Durrell Listening-Reading Series (1970) are given as grade equivalents which have been determined by national norms. The first grade was not tested because it was too early in the school year for children to have learned to read. With the exception of the fourth-grade, the mean reading scores show a trend of progressively poorer level of achievement from the second through the sixth grade, a typical occurrence in large cities and other areas where the population is economically disadvantaged. The increasing discrepancy at successive grade levels between national averages and those of the sample tested would probably have been greater if it were not for the substantially higher reading scores of children in School A whose families have a higher average income and living standard.

The variability of reading scores also increased by grade level, as more and more children in School B slipped below the national norms. At School B, 16 of 22 fourth-grade students were below grade level in reading comprehension. In reading vocabulary they were already 1.2 years below the norms. A glance at the reading comprehension scores in Table 1 reveals that at each successive grade level, as the mean reading score fell farther behind the national norm, the variablity increased.

The average number of school children in each family was two or three. The total number of books at home as stated by the child and/or

TABLE 1

Selected Descriptive Variables

of the Sample Tested by Grade Level

Variable	Grade	N	Grade Level	S.D.
Reading Comprehension	1	-	--	---
	2	52	2.65	.93
	3	45	3.35	1.14
	4	43	4.55	1.30
	5	58	5.10	1.73
	6	57	5.50	2.55
Siblings in School	1	31	2.09	1.27
	2	33	2.36	1.06
	3	32	3.59	1.64
	4	33	2.88	1.82
	5	30	2.87	1.72
	6	31	3.00	1.67
Number of Books per Child (reported by child)	1	31	16.94	17.96
	2	33	19.82	20.83
	3	32	19.44	25.69
	4	31	20.70	27.52
	5	30	21.17	26.42
	6	31	21.74	24.11
Number of Book Titles Given	1	36	2.19	1.60
	2	33	2.78	1.61
	3	32	2.91	1.91
	4	37	3.03	1.74
	5	35	2.71	1.96
	6	36	2.86	1.50
Parents Have a Library Card	1	36	.19	.47
	2	36	.33	.59
	3	32	.22	.55
	4	37	.19	.40
	5	35	.26	.44
	6	36	.31	.53
Siblings Have Library Cards	1	36	.67	.93
	2	36	.67	.36
	3	32	1.38	1.58
	4	37	1.00	1.51
	5	35	1.29	2.01
	6	36	1.39	1.61

his parent was divided by the number of children in school to obtain a ratio of books per child that ranged from 16-24 books per child. Yet, when children were asked to give the titles of their books, the average number given ranged from only 2.19 to 3.03. If there were more books at home, the children evidently had not read or were not very familiar with them.

It was thought that another indication of the reading climate at home would be evidenced by the number of parents and children who had library cards. The average number of parents who had library cards ranged from .19 to .33. The number of children who had library cards was substantially higher because of the greater number of children per family. The average ranged from .67 to 1.39. Children at School B are encouraged to read by having a Bookmobile visit once a week, a service provided jointly by Model Cities and the Fall River Public Library. A library card is prerequisite to borrowing books.

Reading attitude scores. Each subtest was scored according to the number of times reading was preferred to other alternatives. In light of the description of the sample tested, it is not surprising that the mean reading attitude scores were low and the variability high (Table 2). Mean attitude scores toward reading at home across five of the six grade levels were slightly lower than those expressed for reading in school. Only at the fifth-grade level were these two mean attitude scores almost the same. There were substantial differences between desire to visit the library and receiving books as presents or purchasing books.

The data characterize the respondents as having less interest in reading activities that require them to spend time and exert effort such as reading at home. Therefore, attitudes toward purchasing books and receiving books as presents were generally higher than those expressed for other reading dimensions. These aspects of reading connote more passive behavior. They do not demand the same effort and commitment as reading independently at home or visiting the library.

Do older children regard reading more positively than younger children who are just learning how to read? Data in Table 2 show that at the lower grade levels, the attitudes expressed by third graders were not as positive as those expressed by first graders. Yet, the trend is reversed at the upper grade levels where sixth graders expressed more positive attitudes than fourth graders. Data on other groups are needed before we can determine whether the trend is peculiar to the group tested in this study or whether it is common. The third graders might have more positive attitudes at the end of their third year of formal schooling when their reading ability is improved. Only further testing can provide an adequate answer to this question.

Profiles of reading attitudes. One of the advantages of the pair comparison method and the freedom of choice of alternatives was to show whether groups or individuals were primarily interested in academic or non-academic activities. The subtests reading in school and/or places (library) to visit provide this information. Table 3 was constructed to illustrate this feature of the instrument. It shows by grade level where reading and other academic subjects such as arithmetic and spelling ranked among

TABLE 2

Means and Standard Deviations

of the Bullen Reading Attitude Measures Test

and Retest by Grade Level

Reading Dimension	Grade	Score	N	Test Mean	Test S.D.	Retest Mean	Retest S.D.
1. Reading at home	1	5.00	46	2.17	1.57	2.24	1.51
	2	5.00	47	1.53	1.11	2.15	1.30
	3	5.00	35	1.74	1.30	2.09	1.61
	4	5.00	40	2.33	1.46	2.45	1.61
	5	5.00	49	2.18	1.37	1.98	1.67
	6	5.00	48	3.15	1.55	2.83	1.66
2. Reading at School	1	5.00	46	2.37	1.36	2.50	1.41
	2	5.00	47	2.15	1.20	1 98	1.35
	3	5.00	35	2.40	1.42	2.40	1.42
	4	5.00	40	2.68	1.46	2.78	1.12
	5	5.00	49	2.14	1.23	2.80	2.09
	6	5.00	48	3.33	1.37	2.50	1.97
3. Receiving Books as presents	1	5.00	46	2.17	1.62	2.00	1.30
	2	5.00	47	2.04	1.01	2.19	1.21
	3	5.00	35	1.74	1.30	1.97	1.38
	4	7.00	40	3.41	1.81	3.35	1.67
	5	7.00	49	3.00	1.64	3.10	1.73
	6	7.00	48	4.33	1.82	4.02	1.80
4. Visiting the Library	4	7.00	40	3.00	2.06	2.45	1.50
	5	7.00	49	2.51	2.04	2.06	1.43
	6	7.00	48	2.77	2.31	3.06	1.36
5. Purchasing Books	4	7.00	40	3.56	1.92	3.93	1.65
	5	7.00	49	3.31	1.80	3.35	1.81
	6	7.00	48	4.50	1.94	4.13	1.83
Total Attitude Score	1	15.00	46	6.72	3.45	6.74	3.65
	2	15.00	47	5.72	2.55	6.32	2.91
	3	15.00	35	5.49	3.33	6.46	3.82
	4	31.00	40	14.88	6.49	14.95	6.63
	5	31.00	49	13.14	5.98	13.28	6.78
	6	31.00	48	18.08	7.40	16.52	6.99

music, art, and writing. Writing at grade levels one through three is intended to be handwriting, while at grade levels four through six, it is intended to represent written composition.

Alternatives are placed in order of the number of times they were selected at each grade level; a rank order of one is given to the most frequently chosen alternative, and a six to the least preferred alternative. It is possible to rank order choices for individuals as well as groups.

The rank order of school activities by grade level clearly illustrates that across grade levels, the most preferred alternatives are non-academic in nature, as we might have expected on the basis of the total group profile. Art, music and handwriting were favored among children in the first three grades, while art, music, and spelling were favored among children in grades four through six. Counter to the trend were the sixth-graders who made reading their number one choice.

One of the most notable differences between upper and lower grades is the change in rank of writing, treated as handwriting for grades one to three, it was the first choice, and treated as written composition for grades four through six, it was the last choice. Again we see the trend of preference for activities that demand less effort.

TABLE 3

Group Profiles

*Rank Order of Alternatives for Preferred Activities in School

	Grade					
Alternatives	1	2	3	4	5	6
Art	5	2	2	4	1	3
Music	2	3	3	2	2	4
Writing	1	1	1	6	6	6
Spelling	4	4	5	1	3	2
Reading	3	5	6	3	4	1
Arithmetic	6	6	4	5	5	5

*Ranked in order of preferrence from high to low. A rank of one is the most preferred; six is the least preferred.

Response Consistency. The answers given on the repeated pairing in each subtest are compared and their correspondence tabulated, one point given for each answer that is the same as its matching counterpart. This feature enables the examiner to determine how firmly each respondent is committed to his expressed attitude. Subtests having 15 pairs have three pairs repeated; those having 28 pairs have four pairs repeated. When questions are repeated, the pairs are given in reverse order. Therefore, the maximum subtest consistency scores can be either three or four. The maximum possible consistency score for the total test is nine for the primary pictorial form and 18 for the written upper grade form. We would expect to find older children more consistent in expressing their attitudes because of the developmental factor which was evidenced in the total test attitude scores. Data on the consistency scores for each grade level are shown in Table 4. A trend toward higher consistency scores at each successive grade level can be noted. Although average consistency scores are shown for groups, it is possible to obtain consistency scores for individuals on each subtest.

Relationship Among the Reading Dimension Tested. One of the purposes of using several subtests was to isolate what were hypothesized as separate dimensions of reading which contributed to a general attitude toward books and reading. The subtests were intercorrelated to determine whether they were actually tapping different dimensions. First, let us review the relationships among subtests on the primary pictorial form. The intercorrelations in Table 5 show that the subtests reading at home and reading in school, as well as reading at home and receiving books as presents, have low intercorrelations which justify the use of all three subtests to measure relatively independent reading attitudes. These data have provided the first tangible evidence that attitudes toward reading in school and reading outside school are different.

The intercorrelations of the BRAM subtests for the upper grades are shown in Table 6. As might be expected, the most highly related subtests are receiving books as presents and purchasing books if given two or three dollars to spend. If it were desirable to shorten the test, one of these two subtests could be eliminated. Purchasing books is less related to reading in school than is receiving books as presents. Therefore, the former subtest would be the logical choice to eliminate. The lowest correlations were between visiting the library and reading in school. In fact, desire to visit the library was the most independent subtest. With this exception, the interrelationships of the tests were similar across forms. We would expect to find many statistically significant relationships, since all subtests purportedly measure attitudes toward books and reading. However, for practical purposes, the subtest intercorrelations were sufficiently low enough to recommend their use as measures of separate dimensions of attitudes. Generally, the correlations among subtests are higher at successive grade levels, which provides evidence that a more global attitude toward reading is a function of age.

Reliability. Ordinarily only one reliability coefficient is given for a test, but in the interest of providing a more thorough analysis of the test and stability of attitudes, the reliability coefficients are given by grade level. The test-retest lapse period was three weeks. Table 7 shows the reliability coefficients of the subtests and the total test

TABLE 4

Means and Standard Deviations of Consistency Scores

on the BRAM Subtests by Grade Level

Subtest	Maximum possible score	Grade	N	Test Mean	Test S.D.	Retest Mean	Retest S.D.
Reading at home	3.00	1	47	1.76	.96	1.83	7.01
	3.00	2	52	1.77	.86	1.96	.87
	3.00	3	44	2.14	.72	2.17	.91
	3.00	4	44	2.33	.72	2.40	.77
	3.00	5	58	2.37	.75	2.61	.53
	3.00	6	56	2.42	.76	2.56	.64
Reading in school	3.00	1	47	2.20	.96	1.89	.91
	3.00	2	52	2.00	.92	2.11	.88
	3.00	3	44	2.29	.78	2.46	.81
	3.00	4	44	2.23	.82	2.43	.70
	3.00	5	58	2.47	.64	2.45	.67
	3.00	6	56	2.56	.70	2.46	.82
Receiving books as presents	3.00	1	47	2.11	.89	2.30	.91
	3.00	2	52	2.11	.86	2.15	.88
	3.00	3	44	2.34	.83	2.37	.72
	4.00	4	44	3.10	1.04	3.23	.82
	4.00	5	58	3.25	1.04	2.45	.67
	4.00	6	56	3.54	.82	3.65	.60
Visiting the Library	4.00	4	44	3.00	.81	3.18	.83
	4.00	5	58	3.00	.81	3.25	.87
	4.00	6	56	3.17	.94	3.46	.76
Purchasing books	4.00	4	44	3.23	.88	3.35	1.01
	4.00	5	58	3.29	.95	3.41	.70
	4.00	6	56	3.52	.68	3.48	.76
Total Consistency Score	9.00	1	47	6.07	1.88	6.02	1.92
	9.00	2	52	5.87	1.71	6.21	1.60
	9.00	3	44	6.77	1.69	6.97	1.83
	18.00	4	44	13.80	2.74	14.58	2.07
	18.00	5	58	14.37	2.51	15.12	1.66
	18.00	6	56	15.21	2.11	15.60	2.14

TABLE 5

Intercorrelations Among BRAM Subtests

Primary Pictorial Form

Subtest	Grade	N	Subtest Reading at home	Subtest Reading at school	Subtest Receiving books as presents
Reading at home	1	47	1.00		
	2	52	1.00		
	3	44	1.00		
Reading at school	1	47	.26	1.00	
	2	52	.34*	1.00	
	3	44	.36*	1.00	
Receiving books as presents	1	47	.59***	.21	1.00
	2	52	.53***	.29*	1.00
	3	44	.58***	.39*	1.00

* $p < .05$
** $p < .01$
*** $p < .001$

TABLE 6

Intercorrelations Among BRAM Subtests

Upper Grades Written Form

Subtest	Grade	N	Subtests: Reading at home	Reading in school	Receiving books as presents	Visits the Library	Purchases Books
Reading at home	4	44	1.00				
	5	58	1.00				
	6	56	1.00				
Reading in school	4	44	.45**	1.00			
	5	58	.48***	1.00			
	6	56	.51**	1.00			
Receiving books as presents	4	44	.54***	.64***	1.00		
	5	58	.50***	.39**	1.00		
	6	56	.82***	.47**	1.00		
Visiting the Library	4	44	.19	.31	.48**	1.00	
	5	58	.39**	.16	.23	1.00	
	6	56	.56***	.25	.54***	1.00	
Purchasing books	4	44	.39*	.40**	.64***	.40**	1.00
	5	58	.58***	.52***	.76***	.36*	1.00
	6	56	.80***	.42**	.90***	.59***	1.00

* $p < .05$
** $p < .01$
*** $p < .001$

scores by grade level. One of the questions posed in this study was whether attitudes of older children would be more firmly ingrained than those of younger children. The consistency scores shown in Table 4 indicated that older children were more consistent in their choices. We would expect that the reliability of the test would be a function of age also. In Table 7, we find that the correlation coefficients between test and retest for grades one to six, range from .46 to .82, progressively higher at successive grade levels, which clearly shows the presence of a developmental factor. This result might have been anticipated on the basis that younger children have brief attention spans and tend to go from one activity to another with little forethought. Further, their experiences are probably too limited to enable them to form very definite attitudes. An attitude instrument that does not present attractive alternatives would not be able to reveal the developmental factor so clearly.

From grades three through six, the coefficients become more stable, ranging from .75 to .82, which seem to be very high for attitude tests, and, in particular, for the method of pair comparisons, when two attractive alternatives are presented, or, conversely, when the respondent may find both alternatives similarly unattractive. These factors of the method lead to response inconsistencies, and their presence can be very useful in properly diagnosing attitudes, particularly when the inconsistencies deal with reading. An instrument that is not capable of revealing the presence of conflicting attitudes would be doing only part of the job and its validity would be questionable despite the fact that its reliability might be extremely high. Validity is of greater importance in measuring attitudes than is reliability, although the latter is also very desirable. The brevity of the test, especially at the lower grade levels, lowers the reliability coefficients. If we treated the test and retest as one test, and used the common Spearman-Brown split-half method for obtaining an instrument's reliability, the coefficients would be considerably higher, as shown in the column labeled S-B in Table 7.

Validity. One of the purposes of the study was to explore the relationships between reading attitude scores and their hypothesized determinants. Children were interviewed and their parents mailed a questionnaire in order to obtain substantive information on conditions for reading at home, reading behaviors, use of the public library, and other factors assumed to be related to the formation of reading attitudes. The parents' questionnaire contained many of the same questions as the children's questionnaire, particularly those that seemed to warrant cross-validation. Correspondence between answers given by parents and their children were cross checked for validity. When large discrepancies occurred between answers given by parent and child, both answers were excluded from analysis. Copies of the children's and parents' questionnaires are shown in Appendices B and C.

First-graders were unable to respond to many questions asked during the interview, particularly those on reading habits and ability, since they had not received any formal training in reading. Some had difficulty

TABLE 7

Reliability Coefficients

of the Bullen Reading Attitude Measure

by Grade Level

Grade	Maximum possible score	N	Mean	S.D.	Mean	S.D	r	S-B
1	15.00	46	6.72	3.45	6.74	3.65	.46**	.63***
2	15.00	47	5.72	2.55	6.32	2.91	.53***	.69***
3	15.00	35	5.49	3.33	6.46	3.82	.70***	.82***
4	15.00	40	14.88	6.49	14.95	6.63	.75***	.86***
5	15.00	49	13.14	5.98	13.28	6.78	.80***	.89***
6	15.00	48	18.08	7.40	16.52	6.99	.82***	.90***

* p < .01
** p < .05
*** p < .001

understanding the questions, which led to many discrepant answers between parent and child. Consequently, these data were not included in the analysis on factors related to reading attitudes.

Data for grade levels two and three were combined. Most of the variables considered under reading conditions at home were related to attitude scores at one or more grade levels. The data in Table 8 show that the most frequently occurring statistically significant relationships involved frequency of reading at home, having stories read to them, the availability of books at home (ratio of books per child), and the positive influence of fathers taking them to the library. We also wanted to know whether certain family members who read stories to the children made a greater impact than others. Those who figured most prominently were fathers of children at grade level four and brothers at grade levels two and three. Apparently having mothers read stories occurs similarly among the children tested and does not account for significant differences. But having stories read to them by their fathers or brothers suggest an additional and unusual experience that promotes positive reading attitudes. Another reading condition at home that was significant was the number of academic activities preferred in their leisure time in contrast to the number of domestic activities they preferred. The latter bore a significant negative relationship to reading attitude scores. The number of children in the family was also negatively related to attitudes. Although the result occurred at only grade level five, it possibly suggests the inability of some parents of large families to provide books and reading experiences conducive to the formation of desirable reading habits and attitudes.

Significant school-related factors were reading comprehension and personal estimate of reading ability at grade levels two and three. The lack of their importance at grade levels four through six is noteworthy. Generally upper grade children had more positive attitudes toward reading and even though the variability in mean reading achievement scores increased, reading attitude was not affected accordingly. It may be that early experiences in learning to read affect attitudes toward reading until a certain level of accomplishment is reached.

Frequency of visiting the public library, having a library card, and whether parents had a library card were significant factors at two or more grade levels. Similar to the question on the impact of certain family members who read stories to children was the question on persons who accompanied them to the library. Again we find fathers more influential at grade level four and at grade levels two and three where mothers were influential also. However, the presence of mothers of fourth-grade children had a negative effect which may be attributed to a developmental factor, an attempt to shrug off the urgings and attentions of the mother. The total number of persons who accompanied the child to the library was also important to second- and third-graders. The greater number of significant factors at grade levels two and three may be attributed to the fact that the public library is located far away from both schools and younger children would need to be transported by an adult.

TABLE 8

Factors Related to BRAM Scores

by Grade Level

Factors	Grade Level 2 & 3 (N=62)	4 (N=37)	5 (N=35)	6 (N=35)
Reading Conditions at Home				
No. of Siblings			-.37*	
Ratio of books per child	.48**			.47**
No. of domestic activities preferred		-.37*		
No. of academic activities preferred			.42*	.51**
Frequency of reading at home			.37*	
Stories read to child	.45*		.42*	
Frequency		.37*	.37*	
Impact certain family members				
Father		.41*		
Mother				
Sister				
Brother	.46*			
Total persons				
Impact of Others				
Frequency of watching television				
School-Related Factors				
Reading comprehension	.44**			
Reading vocabulary				
Personal estimate of reading ability	.41*			
Other Factors				
Sex				.43*
Bilingualism			.33*	
Use of Public Library				
Child has library card	.37*		.41*	
Parents have library card	.48*			
Frequency of visiting library	.45*			
Influence of person accompanying child				
Father	.46*	.51**		
Mother	.51**	-.34*		
Sister				
Brother				
Others				
Total Persons	.41*			

* $p < .05$
** $p < .01$

Other related factors occurred at grade level six where girls had higher scores on four or five attitude subtests and bilingualism (Portuguese) at grade level five related to attitude toward reading in school. Unrelated factors were frequency of watching television and reading vocabulary. With these exceptions, all variables thought to be related to reading attitudes were significant at one or more grade levels.

Teachers' Judgment as a Validity Measure. As mentioned earlier in the procedures used for validation, teachers at grade levels two through six were asked to judge which five children in their classroom had positive reading attitudes, and which five had negative attitudes. The teachers' instructions are shown in Appendix E. All teachers at grade levels two and three were successful in differentiating, but, as a group, teachers at the upper grade levels were not. T-tests of the differences between groups selected by teachers at grade levels two and three are shown in Table 9. Ironically, lower grade teachers were competent in judging children on reading attitude dimensions other than reading in school, which is contrary to expectations, since teachers have a better opportunity to judge attitudes toward reading in school where reading behaviors can be directly observed.

Did the selected groups differ on reading conditions and behavior deemed to contribute to reading attitudes? T-tests of the differences on selected variables between groups having positive and negative attitude scores as judged by their teachers are shown in Table 10. There were 12 variables on which the groups differed, and they included reading comprehension and reading vocabulary not previously found to be significant factors. Among the twelve variables on which the groups differed, ten were the same as those found in the total group validity study reported previously. They included frequency of reading at home, being read to by their mothers, number of titles of books they remembered having at home, and personal estimate of their reading ability. Six of the differences between groups occurred on questions related to use of the public library. They were as follows: having a library card, visiting the library (particularly with their mothers), parents and siblings had library cards, and more persons had accompanied them to the library. Although significant differences were obtained between groups on reading vocabulary and achievement, teachers had been cautioned before making their selections that reading attitudes and achievement were seldom highly related. It is probably difficult to eliminate reading achievement from the concept of what makes a child receptive to reading. This result prompts the question of whether these teachers would have been as successful if they had judged the attitudes of an entire class of 30 pupils. On the basis of earlier findings on the relationship of attitudes and achievement, their success would be doubtful.

Further inspection of the data by school at grades four, five, and six helps to explain why upper grade teachers, as a group, were not as successful as the lower grade teachers in differentiating between children who had positive and negative reading attitudes. Separate data analyses of teachers selections at School A and School B were undertaken. Teachers at School A were successful in selecting groups

TABLE 9

T-tests of Difference on BRAM Scores

Between Children Selected by Their Teachers

as Having Either Positive or Negative Reading Attitudes

Grades Two and Three

Reading Attitude Dimension	Group	N	Mean	S.D.	t-test
Reading at home	Positive	20	2.50	1.43	3.429**
	Negative	20	1.05	1.16	
Reading at school	Positive	20	1.72	2.95	1.45
	Negative	20	1.22	1.49	
Receiving Books as presents	Positive	20	2.60	1.32	2.79**
	Negative	20	1.55	.97	
Total Reading Attitude Score	Positive	20	7.55	3.60	3.13**
	Negative	20	4.35	2.63	

* $p < .05$
** $p < .01$

TABLE 10

T-tests of Differences on Selected Variables

Between Groups Expressing Positive and Negative Reading Attitudes

as Judged by Their Teachers

Grades Two and Three
(N = 40)

Variable	Attitude Group	N	Mean	S.D.	t-test
Reading vocabulary	Pos.	13	36.40	8.92	3.92***
	Neg.	11	24.30	10.10	
Reading Comprehension	Pos.	13	37.70	11.10	4.67***
	Neg.	11	23.70	6.90	
Frequency of Reading at home	Pos.	13	5.00	1.00	3.06**
	Neg.	11	3.36	1.55	
Visiting public library	Pos.	13	.86	.35	3.83***
	Neg.	11	.27	.44	
Number of book titles given	Pos.	13	3.64	1.23	4.18***
	Neg.	11	1.60	1.31	
Has library card	Pos.	13	1.00	0.00	3.38**
	Neg.	11	.53	.50	
Visits library with mother	Pos.	13	.71	.45	4.46***
	Neg.	11	.07	.26	
Total number of persons who accompany child to library	Pos.	13	1.43	1.35	2.68*
	Neg.	11	.33	.70	
Parents have a library card	Pos.	13	.92	.27	2.85**
	Neg.	11	.47	.50	
Siblings have library card	Pos.	13	2.08	1.21	3.60**
	Neg.	11	.60	.88	
Mother reads to child (or has read)	Pos.	13	.93	.26	4.03***
	Neg.	11	.33	.47	
Personal estimate of reading ability	Pos.	13	3.29	.59	2.97**
	Neg.	11	2.53	.72	

* $p < .05$
** $p < .01$
*** $p < .001$

that differed significantly on total attitude scores and desire to visit the library (Table 11). It is likely they would have been more successful except for one teacher's judgment. She had replaced the former classroom teacher, and had known the children only a few weeks before making her choices.

Variables on which the selected groups in the upper grades at School A differed significantly are shown in Table 12. Reading vocabulary and comprehension, frequency of reading at home, siblings having library cards, and personal estimate of reading ability are some of the same factors that were significant in differentiating groups at the lower grade levels. Variables that were significantly correlated with total attitude scores of the upper graders at School A and for grades two and three at both schools are shown in Tables 13 and 14. Among them are many that were found to be significant in the previous validity study.

At School B, all upper grade teachers were experienced, but their selections were not sufficiently discriminating. A condition that might possibly account for their inability as compared to other teachers is the weekly visits of the Bookmobile. Comments made at School B about the Bookmobile indicated its popularity especially among children who looked forward to getting away from class for a brief period. Teachers might have misconstrued their enthusiasm. In fact, data presented in Table 15 show that the greatest discrepancy between selected groups was on the question of visiting the library, in which the group designated as having positive attitudes expressed less interest in visiting the library than the group designated as having negative attitudes. Contrary to the teachers' expectations at School B, the selected negative attidue group had slightly higher mean scores on all the BRAM subtests. The only variables on which the two selected groups differed significantly were on reading comprehension and vocabulary on which the selected positive attitude group scored higher. But the difference in mean scores is less at School B than at School A, where the differences were significant also.

TABLE 11

T-tests of Differences on BRAM Scores

Between Groups Selected by Their Teachers

as Having Either Positive or Negative Reading Attitudes

School A, Grades Four, Five, and Six

Reading Attitude Dimension	Group	N	Mean	S.D.	t-test
Reading at home	Positive	15	3.13	1.89	1.57
	Negative	15	2.07	1.83	
Visiting the library	Positive	15	3.53	2.17	2.89**
	Negative	15	1.47	1.73	
Reading in School	Positive	15	3.20	1.61	1.80
	Negative	15	2.07	1.83	
Receiving books as presents	Positive	15	4.27	2.09	1.59
	Negative	15	3.07	2.05	
Desire to purchase books	Positive	15	4.53	1.89	1.20
	Negative	15	3.67	2.06	
Total Reading Attitude Score	Positive	15	18.67	8.23	2.19*
	Negative	15	12.33	7.58	

* $p < .05$
** $p < .01$

TABLE 12

T-tests of Differences on Selected Variables

Between Groups Expressing Positive and Negative Reading Attitudes

as Judged by Their Teachers

School A, Grades Four, Five, and Six

Variable	Attitude Group	N	Mean	S.D.	t-test
Reading voacbulary	Pos.	15	69.67	18.48	3.38**
	Neg.	15	47.27	17.82	
Reading comprehension	Pos.	15	77.87	15.20	4.95***
	Neg.	15	48.20	17.54	
Frequency of reading at home	Pos.	15	5.40	.97	4.12***
	Neg.	15	2.63	1.85	
Siblings have library cards	Pos.	15	3.00	3.23	2.18*
	Neg.	15	.56	1.01	
Estimate of Reading ability	Pos.	15	3.73	.91	2.87*
	Neg.	15	2.78	.44	

* $p < .05$
** $p < .01$
*** $p < .001$

TABLE 13

Correlations Between Selected Variabls

And BRAM Total Scores by Groups

Rated by Teachers as Having Either Positive or Negative Attitudes
Grades Two and Three

Variables	N	r
Reading comprehensiong	40	.44**
Brother reads to child	29	.46*
Number of Books owned	29	.48**
Number of books siblings own	29	.47*
Ratio of books per child	29	.40*
Visiting the public library	29	.45*
Recency of borrowing books	28	.51**
Personal estimate of reading ability	29	.41*

* p < .05
** p < .01

TABLE 14

Correlations Between Selected Variabls

and BRAM Total Scores by Groups

Rated by Teachers as Having Either Positive or Negative Attitudes

School A, Grades Four, Five, and Six

Variable	N	r
Sex	30	.40*
Ratio of books per child	20	.50*
Number of academic activities preferred at home	20	.51*
Having had stories read to them	20	.49*
Personal estimate of reading ability	20	.54*

* p < .05

TABLE 15

T-tests of Differences on BRAM Scores

and Reading Achievement Scores Between Groups

Selected by Their Teachers

as Having Either Positive or Negative Reading Attitudes

Grades Four, Five, and Six at School B

Reading Attitude Dimension	Group	N	Mean	S.D.	t-test
Reading at home	Pos.	15	2.60	1.60	-0.12
	Neg.	15	2.67	1.59	
Visiting the library	Pos.	15	2.40	1.68	-1.75
	Neg.	15	3.80	2.60	
Reading at school	Pos.	15	2.60	1.24	-0.27
	Neg.	15	2.73	1.44	
Receiving books as presents	Pos.	15	3.93	1.75	-0.32
	Neg.	15	4.13	1.69	
Desire to purchase books	Pos.	15	4.33	1.99	-0.40
	Neg.	15	4.60	1.68	
Total reading attitude score	Pos.	15	15.87	6.93	-0.85
	Neg.	15	17.93	6.85	
Reading vocabulary score	Pos.	15	48.80	15.67	2.83**
	Neg.	15	35.43	8.44	
Reading comprehension score	Pos.	15	44.80	11.57	2.96**
	Meg.	15	33.36	8.97	

* $p < .05$
** $p < .001$

CHAPTER VI

Conclusions

The use of pair comparisons fulfilled its promise as a method that would insure a measure of validity not readily obtained by alternative methods as Guilford suggested (Guilford, 1957, p. 174). Data showed that reading conditions and behavior posited as having a bearing on the formation of attitudes, i.e., reading conditions at home, use of the public library, reading habits, and personal estimate of reading ability were statistically significant factors at one or more grade levels. Contrary to expectation, reading comprehension was significantly related to attitude scores at grade levels one and two, but, as expected, not at grade levels four through six. The pattern of high correlations between these factors and attitude scores provided evidence of the instrument's construct validity.

Teacher judgment as a measure of validity was partially successful. Six of ten teachers were able to differentiate between children who had either positive or negative attitudes. Three teachers at School B were unable to make these distinctions, presumably because an unusual situation was present (the weekly visits of the Bookmobile). Teachers mistook the children's enthusiasm for the opportunity to get away from the classroom with their desire to visit the Bookmobile. The remaining teacher at School A had recently replaced a former teacher and had the disadvantage of knowing the children only a few weeks before making her selections. Two of the variables separating the selected groups markedly were reading comprehension and vocabulary. According to the findings of the total group validity study reported herein and the findings of other research studies, reading achievement has not been significantly related to reading attitudes of children in grades four through six. Therefore, it is dubious whether teachers would have been successful had they made judgments about the attitudes of their entire classes.

The use of similarly attractive or unattractive stimuli contributed to response inconsistency. While the latter tends to lower an instrument's reliability, which is usually deemed undesirable, it is viewed in the present case as a distinct advantage because of the information it provides and because the reliability coefficients were not markedly affected. Repeated pairings in each subtest are included to reveal inconsistent responses, and specifically whether these inconsistencies involve reading or books. Consequently, the method enables the examiner to know the magnitude of the expressed attitude as well as its relative strength for each individual on each subtest. This feature has not been incorporated in existing attitude instruments that give only group reliability coefficients for the total test score, and these might not necessarily apply to the group being tested, and certainly not to individual scores. Therefore, it is the opinion of this investigator that the advantages of the pair comparison method for measuring attitudes far outweigh any disadvantages it might have with respect to

limitation of numbers of pairs that could comfortably be handled by the respondent, or a possible slight decrease in reliability.

Despite some response inconsistency that might have been caused in part by the method, and certainly by the instrument's brevity, the reliability coefficents were surprisingly high. At grade levels three through six, they ranged from .70 to .82. Had the test been lengthened, thay would have ranged from .82 to .90. The reliability coefficients for grades one and two were .46 and .53, and if the tests had been doubled in length, the coefficients would have been .63 and .69. The increase in reliability at successive grade levels provides evidence that consistent attitudes are a function of age. The lower reliability coefficients at grade levels one and two were expected. They reflect the short attention span of younger children who go from one activity to another, seemingly with little forethought. Also, they have not had enough experience to have formed very definite attitudes. The pair comparison method was successful in revealing these developmental factors. The identification of very young children who express negative attitudes consistently or positive attitudes inconsistently is of paramount importance at a time when attitudes can be more easily modified. The BRAM instrument can be used effectively for this purpose. It is very much in keeping with the current testing movement which is showing greater concern for the development of instruments that can be used to describe individuals (rather than groups) for diagnostic purposes.

The instrument contains the following features:

Brief

1. Easy to administer, score and interpret
2. Provides scores on subtests on separate reading dimensions which can aid in diagnosing specific causes of poor reading motivation
3. The readability problem is obviated by having pictorial forms for grades one through three, and a written form for grades four through six which contains only common words.
4. Representative illustrations on the primary pictorial form give the respondent freedom to choose his own setting
5. Provides information to construct group and individual profiles on preference for reading in relation to other available alternatives. Consequently, it is possible to determine whether respondent's interests are primarily academic or non-academic.
6. Children are enthusiastic about responding to the instrument. They delight at the freedom to make their own choices. They do not view the instrument as a test, which is probably conducive to their giving more candid answers.

CHAPTER VII

Recommendations

The Bullen Reading Attitude Measure has unusual promise as an instrument that can effectively assess reading attitudes. In view of the increased interest in improving reading ability of urban children, the introduction of this test is particularly timely, and should prove useful in the proper diagnosis of groups and individuals and point to possible means of remediation.

In its present form, the instrument can be used by teachers or researchers who wish to compare groups or individuals. Intragroup comparisons may be very helpful to classroom teachers. But, the instrument would have more universal application if norms were established on other reference groups, since they would aid in the interpretation of scores. This study provides one reference group, urban white children at six grade levels. After other group norms are established, the instrument should be published and made available to others. Alternate parallel forms of the instrument should be developed to accomodate repeated testing.

Commercial publication would help to call attention of teachers to the need for measuring this important and controlling dimension of human behavior. Teachers and curriculum planners need to show greater concern for helping children establish an interest in reading and a habit that can last them a lifetime, despite the fact they might never attain a high degree of reading competence. While a certain level of reading competence is desirable, its overwhelming importance in the school curriculum has overshadowed the relative importance of reading attitudes.

Appendix A

Children's Preferred Activities Questionnaire

PRELIMINARY QUESTIONNAIRE

Name of Child_____School_____

Name of Recorder_____Grade_____

1. When school is out for the day, and you go home, what are some of the things you do? (games they play, TV, help around the house, etc.)

2. What are some of the things you do not like to do after school? or would rather not do?

3. What things do you do on Saturdays? (If no answer, mention movies, TV, shopping, housework, visit relatives, babysitting, hobbies, etc.)

4. What things do you do on Sunday? (same procedure as previous question)

5. Do you like Saturdays and Sundays better than days during the week? Why or why not?

6. If you could go some place for a day, where would you like to go? What would you do there?

7. Where would you not like to go? What would you not like to do?

8. If you were given a choice of where you would like to go, would you like to go to

YES	NO	MAYBE	
____	____	____	a baseball or a football game?
____	____	____	a museum that has stuffed animals?
____	____	____	a museum that has beautiful pictures?
____	____	____	a circus or a fair?

(continued)

YES	NO	MAYBE	
____	____	____	an aquarium that has tanks of fish?
____	____	____	an old house where famous people lived?
____	____	____	a library where you could borrow a book you wanted?
____	____	____	a museum full of science things?
____	____	____	go on board a famous ship such as "Old Ironsides," the Mayflower, or the USS Massachusetts?
____	____	____	a movie?
____	____	____	a play or a puppet show?

9. Which one of the places I just mentioned would you prefer to go to most? What is your second choice?

10. Have you ever been to any of the places I just mentioned?

11. What kinds of toys or games do you have at home?

12. Do you have any books at home you can read? (ask for titles)

13. Would you rather look at pictures or would you rather draw a picture?

14. Would you rather build a model ship or airplane or would you rather have one (boys) already made?

15. Would you rather make a puppet from materials given to you or would you rather (girls) have one already made?

16. Would you like to have a story read to you or would you rather read it yourself?

17. Would you rather make up a story, or read or listen to a story?

18. Would you like to put on a play or would you rather draw a picture?

19. What are some things you do not like to do in school? or things you would rather not do?

20. What are the things you like to do most in school?

21. What are some things you do in school this year that you did not do last year?

22. If you had some money to spend (two or three dollars) what would you buy?

23. If it is a rainy day on Saturday or Sunday and you cannot go out to play, what are some things you would like to do in the house?

24. If you could have any 6 presents you wanted for Christmas or for your birthday, what would you choose?

25. Of the things you mentioned, what would you like the most? _____
The least?_____

26. What do you want to be when you grow up? (What kind of work do you want to do?)

(ADD ANY QUESTIONS YOU THINK MAY GIVE US ADDITIONAL INFORMATION ABOUT WHAT THEY DO OR DO NOT LIKE TO DO. DO NOT DISCUSS ANYTHING ABOUT THE BOOKS EXPOSURE PROGRAM.)

27.

28.

29.

30.

Appendix B

Form B

Children's Questionnaire on Reading Activities

Interview Questionnaire on Children's Reading and Library Activities

A. What are some things you do in your home after school?

_____ _____ ____11 ____12

_____ _____ ____13 ____14

Total Score ____15

B. Which two things would you like to do at home if you had your choice?

_____ ____16

_____ ____17

Total Score ____18

C. How often do you watch television?

	Score
4 or more programs every day	____(5)
2 or 3 programs every day	____(4)
a few programs a week	____(3)
less than above	____(2)
does not have a TV set	____(1)

watches Sesame Street (Yes = 1; No = 0) ____20

D. Do you have any books at home that you enjoy?

(Yes = 1; No = 0)

____21

E. Name some of your books that you enjoy. (Descriptions will suffice if title is unknown)

_____

_____

_____

_____

_____

Number of titles given ____22

F. How many books do you own? ____23, 24

T Score ____25, 26

G. (Grades 2-6) How many books do your brothers and sisters own? ____27

Ratio ____28

H. Where do you keep your books?

_____ ____29

I. Do you have a bookcase for your books? ____30

(Yes = 1; No = 0)

J. Does your school have a library? ____31

(Yes = 1; No = 0)

K. If so, are you permitted to take home books from your school library or Bookmobile? ____32

(Yes = 1; No = 0)

L. Do your parents permit you to bring home library books? (Yes = 1; No = 0) ____33

M. When was the last time you took out a book from your school library or Bookmobile? ____34

	Score
within the past two weeks	____(5)
during the past summer	____(4)
last May or June	____(3)
last year	____(2)
in past years	____(1)
never	____(0)

N. Have you ever visited the Children's Library in the Fall River Public Library? (Yes = 1; No = 0) ____35

O. Do you have a library card? (Yes = 1; No = 0) ____36

P. If so, how often do you take out books from any library? (school library, Bookmobile, or the Fall River Public Library) ____37

	Score
every week	____(6)
every 2 weeks	____(4)
once a month	____(2)
once or twice a year	____(1)
seldom or never	____(0)

Q. If so, with whom have you gone to the Fall River Public Library (Children's Library)?

Father	_____	38
Mother	_____	39
Sister	_____	40
Brother	_____	41
Friend	_____	42
Teacher	_____	43
Other	_____	44
(Total persons)	_____	45

R. Do others in your family have a library card?

(Yes = 1; No = 0)	Yes or No	_____	46
(record number)	Parents	_____	47
(record number)	Siblings	_____	48

S. (Grades 1-3) Does anyone at home read stories to you? (Yes = 1; No = 0) _____ 49

(Grades 4-6) When you were younger, did anyone at home read stories to you? (Yes = 1; No = 0) _____ 50

T. Who? (Both groups)

Father	_____	51
Mother	_____	52
Brother	_____	53
Sister	_____	54
Grandparent	_____	55
Other	_____	56
(Total persons)	_____	57

U. If so, how often were stories read to you? _____ 58

	Score
every night	_____(6)
once a week	_____(4)
now and then	_____(2)
once or twice	_____(1)
never	_____(0)

V. Would you rather read at home or at school or at both places? (Yes = 1; No = 0)

Home	_____	59
School	_____	60
Both home and school	_____	61
Neither	_____	62

W. Have you ever been in a special reading program at school or elsewhere in which you have received extra help in reading?

(Yes = 1; No = 0)

Yes or No _____63

(Place)

Home _____64
Elsewhere _____65
Pleasure program _____66
Instructional program _____67

X. (Grades 1-3) How often do you look at books at home?

(Grades 4-6) How often do you read at home?

_____68

	Score
every day	_____(6)
once or twice a week	_____(4)
not very often	_____(1)
never	_____(0)

Y. Can you understand or speak a language other than English? (Yes = 1; No = 0)

Bilingual _____69

Z. How well do you think you can read?

_____70

	Score
extremely well	_____(5)
very well	_____(4)
good	_____(3)
not very well	_____(2)
poor	_____(1)

Respondent's Name_____ School_____4

Address_____ Grade_____1

Tel. No._____ Male = 1
Female = 2_____5

Parents' Name_____

No. of brothers_____

No. of sisters_____

Total siblings_____

No. of siblings attending school_____

1____2____3____4____5____6____7____8____9____10____

Other pertinent information:

Interviewer_____

Date of Interview_____

Date Parent Questionnaire Sent_____

Date Received_____

Appendix C

Letter to Parents

FALL RIVER PUBLIC SCHOOLS

Administration Offices

Fall River, Massachusetts 02720

James F. Nicoletti
Director of
Middle Grades Education

Robert J. Nagle
Superintendent

Dear

We want to learn more about the reading habits of elementary school children. You can help us by answering the questions on the enclosed form. Your answers will guide us in planning more adequate reading programs.

Please have your child return the form in the enclosed envelope to his school principal. Thank you for your help and interest.

Sincerely,

James F. Nicoletti
Director of Middle Grades
Education

JFN:sa
Enclosures

Appendix C

Parents' Questionnaire on Children's Reading Activities

Name of child _____

Place a check mark ( ) beside your answer.

1. How often does your child read books at home? (Do not include comic books.)

Every day ____
Once or twice a week ____
Every two weeks ____
Not very often ____
Never ____

2. Has your child ever visited the Children's Library in the Fall River Public Library?

Yes ____ No ____ I don't know ____

3. How often does your child bring home public or school library books to read?

Every week ____
Every two weeks ____
Once a month ____
Every two months ____
Seldom or never ____
I do not permit him/her ____
The school does not permit him/her ____

4. How often did/do you or another member of your family read stories to your child?

Every night ____
Twice a week ____
Once a week ____
Twice a month ____
Now and then ____
Never ____

5. If sc, who reads or has read stories to your child?

Father ____ Sister ____
Mother ____ Grandparent ____
Brother ____ Other ____

6. How many children do you have attending the public schools? (Pre-primary through grade 12) Number ____

7. When was the last time your child read a book at home? (Do not include comic books).

Within the past two weeks ____
Within the past month ____
Last summer ____
During the last school year ____
Does not read at home ____

8. About how many books do your school-age children own?

Number ____

Appendix D

Parent-Child Answer Discrepancy Score Sheet

Name_____ ID No._____

1. Reading at home
   Parent's answer____29
   (X-68) Child's answer____30
   Difference____31
   (Yes=1; No=0) Lower score given by parent____32
   (Yes=1; No=0) Lower score given by child____33

2. Visiting Fall River Children's Library
   Parent's answer____34
   (N-35) Child's answer____35
   Difference____36
   (Yes=1; No=0) Lower score given by parent____37
   (Yes=1; No=0) Lower score given by child____38

3. Borrowing books to read
   Parent's answer____39
   (P-37) Child's answer____40
   Difference____41
   (Yes=1; No=0) Lower score given by parent____42
   (Yes=1; No=0) Lower score given by child____43

4. Reading to child
   Parent's answer____44
   (U-58) Child's answer____45
   Difference____46
   (Yes=1; No=0) Lower score given by parent____47
   (Yes=1; No=0) Lower score given by child____48

5. Who read stories to child
   Number given by parent____49
   (T-57) Number given by child____50
   Difference____51
   (Yes=1; No=0) Lower score given by parent____52
   (Yes=1; No=0) Lower score given by child____53

7. Last time child read a book at home (26, 27)
   Parent's answer____54
   (M-34) Child's answer____55
   Difference____56
   (Yes=1; No=0) Lower score given by parent____57
   (Yes=1; No=0) Lower score given by child____58

8. Books school-age children own?
   Parent's ratio____59
   (G-28) Child's ratio____60
   Difference____61
   (Yes=1; No=0) Lower score given by parent____62
   (Yes=1; No=0) Lower score given by child____63

Appendix E

Instructions Given to Classroom Teachers on Selection of Children Who Had Positive or Negative Reading Attitudes

Dear

Last October, I administered a reading attitude measure to all of the students in your class. In order to validate the measure, I need your judgment on which five children you think have very positive attitudes toward leisure-time reading, and which five children have very negative attitudes toward reading. Generally, attitudes do not relate to reading achievement. Therefore, some possible criteria for selection of children with very positive reading attitudes might be those who read more books outside school than required, may have taken more books from the school library and actually read them, and may have discussed the books with the teacher or other students. Possible criteria for the selection of children with very negative attitudes might be a lack of interest in recreational reading, failure to read books at home, misuse of library periods, and expressed dissatisfaction when leisure reading is discussed in class. These are only suggestions; you may have others in mind. Please list your selections below. Your efforts in helping me complete the study on children's attitudes toward reading are greatly appreciated. Please return this form to the principal's office.

VERY POSITIVE ATTITUDES	VERY NEGATIVE ATTITUDES
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

Thank you.

Gertrude F. Bullen
38 Newbury Street
Boston, Mass. 02116

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